

MSc Social and Economic Data Science

Summer semester 2024

(Version: 09 April, 2024)

Postal address

University of Konstanz
Department of Politics and Public Administration
Box 80
78457 Konstanz
Germany

Course Advice for Students of the Master's Programme in Social and Economic Data Science

Katharina Arendt
Room: D328
Tel.: (07531) 88-4494
Email: seds.admin@uni-konstanz.de
Website: www.polver.uni.kn/seds

Office Hours:

Tuesday, 11 - 12 AM online via [zoom](#),

Wednesday, 1:30 – 3 PM, onsite (by appointment)

Student Course Guidance

Tessa Bartels
Email: seds.msc@uni-konstanz.de

Dates of the Summer Semester 2023

Start of term	01.04.2024
End of term	30.09.2024
Beginning of lectures summer semester 2023	08.04.2024
End of lectures	20.07.2024
Lecture-free period around Pentecost	27.05. – 02.06.2024
Exam registration period I (July/August) Department of Economics	25.06. – 02.07.2024
Examination period I Department of Economics	11.07. – 03.08.2024
Exam registration period II (October) Department of Economics	10. – 17.09.2024
Examination period II Department of Economics	01. – 26.10.2024
Exam registration period I Department of Politics and Public Administration	01.05. – 15.06.2024
Exam registration period II Department of Politics and Public Administration	09. – 13.09.2024
Exam registration period I Department of Computer and Information Science	01.05 – 15.06.2014
Exam registration period II Department of Computer and Information Science	09. – 16.09.2024
Exam registration period I Department of History and Sociology	01.05 – 15.06.2024
Exam registration Department of Mathematics and Statistics	Seven days before the exam via ZEuS
Exam registration period I Department of Psychology	01.-30.06.2024
Beginning of lectures winter semester 2024/25	21.10.2024
Lecture-free period	21.12.24 – 06.01.2025
End of lectures	08.02.2025

Further information regarding semester dates can be found [here](#).

1. Foundations of Data Science

Focus Area: Computer Sciences

Data Visualization Basic Concepts, 2+2 hours (6cr)

D. Keim/M. Fischer

Monday, 11:45 – 13:15, R611

See: [ZEuS](#)

Tutorial (2hours), 3 groups

J. Fuchs

Group I	Thu	13:30	till	15:00	Weekly	ZT1202
Group II	Fri	10:00	till	11:30	Weekly	ZT1202
Group III	Fri	11:45	till	13:15	Weekly	ZT1202

Konzepte der Informatik, 4+2 hours (6cr)

B. Pampel

Tuesday, 11:45 – 13:00, online

(recorded lectures on ILIAS)

See: [ZEuS](#)

Tutorial (2 hours), 4 groups

Group I	Fri	08:15	till	09:45	Weekly	P602
Group II	Fri	10:00	till	11:30	Weekly	M628
Group III	Fri	10:00	till	11:30	Weekly	L601
Group IV	Fri	13:30	till	15:00	Weekly	P712

Only in combination with:

Programmierkurs I, 2+2 hours (6cr)

J. Fuchs

Tuesday, 15:15 – 16:45, R611

See: [ZEuS](#) (registration via ILIAS mandatory)

Tutorials (2 hours), 4 groups

Group I	Thu	10:00	till	11:30	Weekly	M628
Group II	Thu	13:30	till	15:00	Weekly	C424
Group III	Thu	15:15	till	16:45	Weekly	D201
Group IV	Thu	17:00	till	18:30	Weekly	F429

Software Engineering, 2+2 hours (6cr)

S. Leue

Tuesday, 10:00 – 11:30, R512

Thursday, 13:30 – 15:00, R512

See: [ZEuS](#)

Focus Area: Mathematics

Analysis und Lineare Algebra, 4+2 hours (9cr)

P. di Dio

Thursday, 11:45 – 13:15, R513

Friday, 11:45 – 13:15, R513

See: [ZEuS](#)

Tutorial (2 hours), 5 groups

Group I	Mon	11:45	till	13:15	Weekly	D201
Group II	Mon	15:15	till	16:45	Weekly	D201
Group III	Tue	10:00	till	11:30	Weekly	F429
Group IV	Thu	11:45	till	13:15	Weekly	D433

Group V	Thu	15:15	till	16:45	Weekly	D201
---------	-----	-------	------	-------	--------	------

Focus Area: Scientific Methods

Econometrics I, 3+2 hours (8cr)

J. Prüser

Wednesday, 15:15 – 16:45, R711

Thursday, 08:15 - 09:45, R712

See: [ZEuS](#)

Tutorial (2 hours), 3 groups

Group I	Tue	08:15	till	09:45	Weekly	G201
Group II	Wed	13:30	till	15:00	Weekly	P607
Group III	Thu	11:45	till	13:15	Weekly	G201

Focus Area: Statistics

Statistics II (Dept. of Economics), 2+2 hours (6cr)

R. Brüggemann

Monday, 15:15 – 16:45, Konzil1

See: [ZEuS](#)

Tutorial (2 hours), 8 groups

Group I	Tue	08:15	till	09:45	Weekly	G309
Group II	Tue	11:45	till	13:15	Weekly	G530
Group III	Wed	10:00	till	11:30	Weekly	M627
Group IV	Wed	11:45	till	13:15	Weekly	G309
Group V	Thu	08:15	till	09:45	Weekly	G227a
Group VI	Thu	13:30	till	15:00	Weekly	G309
Group VII	Thu	15:15	till	16:45	Weekly	G309
Group VIII	Fri	08:15	till	9:45	Weekly	L602

Statistik (Dept. of Sociology), 2+2 hours (6cr)

M. Buis

Monday, 10:00 – 11:30, G201 (lecture)

Thursday, 10:00 – 11:30, G201 (exercise)

See: [ZEuS](#)

Tutorial (2 hours), 5 groups

Group I	Mon	11:45	till	13:15	Weekly	D301
Group II	Mon	13:30	till	15:15	Weekly	G305
Group III	Mon	15:15	till	16:45	Weekly	F427
Group IV	Tue	10:00	till	11:30	Weekly	H308
Group V	Tue	15:15	till	16:45	Weekly	P912

Statistics (Dept. of Political Science), 2+2 hours, (9cr)

T. Shafie

Wednesday, 10:00 – 11:30, Konzil1

Wednesday, 11:45 – 13:15, Konzil1

See: [ZEuS](#)

2. Advanced Methods: Computer Science

Research Projects in Computational Studies of Social Phenomena, 2 hours (6cr) I. Sen
 Monday, 13:30 – 15:00, C421
 See: [ZEuS](#)

Seminar Deep Learning for Social Sciences, 2+2 hours (9cr) M. Pellert/G. Marzo
 Tuesday, 10.00 - 11.30, C421
 Tutorial (1 hours), 1 group

Group I	Wed	13:30	till	15:00	weekly	D430
---------	-----	-------	------	-------	--------	------

See: [ZEuS](#)

Big Data Management and Analysis, 2+2 hours (6cr). M. Grossniklaus
 Thursday, 10:00 – 11:30, ZT1202 (also subscribe on ILIAS!)
 See: [ZEuS](#)

Tutorial (2 hours), 2 groups

Group I	Fri	08:15	till	09:45	Weekly	ZT702
Group II	Fri	13:30	Till	15:00	Weekly	ZT702

Algorithmen und Datenstrukturen, 4+2 hours (9cr) S. Cornelsen
 Monday, 10:00 – 11:30, R513
 Tuesday, 08:15 - 09:45, R513
 See: [ZEuS](#)

Tutorial (2 hours), 3 groups

Group I	Thu	10:00	till	11:30	weekly	D247
Group II	Thu	13:30	till	15:00	weekly	L601
Group III	Fri	08:15	till	09:45	weekly	M628
Group IV	Fri	13:30	till	15:00	weekly	D201

Only in combination with:

Programmierkurs II, 2 hours (3cr) S. Storandt
 Thursday, 15:15 – 16:45, P602 / Friday, 10:00 – 11:30, ZT702
 See: [ZEuS](#)

Datenbanksysteme, 4+2 hours (9cr) M. Grossniklaus
 Monday, 13:30 – 15:00, R712
 Tuesday, 13:30 – 15:00, R513
 See: [ZEuS](#)

Tutorial (2 hours), 5 groups

Group I	Wed	10:00	till	11:30	weekly	D201
Group II	Wed	11:45	till	13:15	weekly	P602
Group III	Wed	13:30	till	15:00	weekly	C424
Group IV	Wed	15:15	till	16:45	weekly	M628
Group V	Wed	17:00	till	18:30	weekly	D201

Document Analysis: Computational Methods, 2+2 hours (6cr) A. Spitz
 Thursday, 11:45 – 13:15, R512

See: [ZEuS](#)

Tutorial (2 hours), 2 groups

Group I	Tue	11:45	till	13:15	weekly	ZT1202
Group II	Wed	13:30	till	15:00	weekly	M628

Graph Data Management and Analysis, 2+2 hours (6cr)

T. Chondrogiannis

Monday, 11:45– 13:15, ZT1202

See: [ZEuS](#)

Tutorial (2 hours), 1 group

Group I	Wed	13:30	till	15:00	weekly	ZT1202
---------	-----	-------	------	-------	--------	--------

Introduction to Machine Learning, 2+2 hours (6cr)

T. Sutter

Friday, 11:45 – 13:15, R611

See: [ZEuS](#)

Tutorial (1 hours), 1 group

Group I	Wed	15:15	till	16:45	weekly	C300
---------	-----	-------	------	-------	--------	------

Multimedia Retrieval: Basic Concepts, 2+2 hours (6cr)

D. Keim

Tuesday, 13:30 – 15:00, ZT1202

See: [ZEuS](#)

Tutorial (2 hours), 2 groups

Group I	Thu	11:45	till	13:15	weekly	ZT1202
Group II	Thu	17:00	till	18:30	Weekly	ZT1202

Data Visualization Basic Concepts, 2+2 hours (6cr)

J. Fuchs

See: **Foundations** for further information

Seminar Data Analysis and Visualization, 2 hours (3cr)

D. Keim

Tuesday, 15:15 – 16:45, ZT1202

See: [ZEuS](#)

Seminar Machine Learning and Optimization, 2 hours (3cr)

T. Sutter

Friday, 10:00 – 11:30, L829

See: [ZEuS](#)

3. Advanced Methods: Statistics

Measurement and Representation Biases in Digital Trace Data-based Studies, 2 hours (3cr)

I. Sen

Wednesday, 15:15 – 16:45, D430

See: [ZEuS](#)

Fallacies of Inferential Statistics, 2 hours (3cr)

T. Shafie

Thursday, 13:30 – 15:00, D430

See: [ZEuS](#)

Data Wrangling and Visualization with Tidyverse, 4 hours (9cr)

T. Shafie

Friday, 10:00 – 13:15, D433

Friday, 11:45 – 13:15, J213

See: [ZEuS](#)

Research Design II: Statistical Modelling and Inference in Quantitative Research,

2 hours (9cr)

M. Herrmann

Monday, 10:00 – 11:30, M629

See: [ZEuS](#)

Applied Time Series Analysis, 3+1 hours (8cr)

R. Brüggemann

Monday (weekly), 11:45 – 13:15, F425

Friday (biweekly), 11:45 – 13:15, D301

See: [ZEuS](#)

Introduction to Machine Learning, 3 hours (6cr)

T. Sutter

Friday, 11:45 – 13:15, R611

Wednesday, 15:15 – 16:45, G300

See: [ZEuS](#)

4. Programming and Scripting

Data Wrangling and Visualization with Tidyverse, 4 hours, (9cr)

T. Shafie

Friday, 10:00 – 13:15, D433

Friday, 11:45 – 13:15, J213

See: [ZEuS](#)

Fallacies of Inferential Statistics, 2 hours (3cr)

T. Shafie

Thursday, 13:30 – 15:00, D430

See: [ZEuS](#)

Data analysis with R, 2 hours (7cr)

M. Herrmann

Group I	Thu	10:00	till	11:30	weekly	BS217
Group II	Thu	11:45	till	13:15	weekly	BS217
Group III	Mon	13:30	Till	15:00	weekly	BS217

See: [ZEuS](#)

Social Media Data Analysis - Tutorial, 2 hours (3 ECTS)

M. Pellert

Group I	Thu	10:00	till	11:30	weekly	D431
----------------	------------	--------------	-------------	--------------	---------------	-------------

See: [ZEuS](#)

Programmierkurs I, 2+2 hours (6cr)

J. Fuchs

Tuesday, 15:15 - 16:45 (R611)

Group I	Thu	10:00	till	11:30	weekly	M628
Group II	Thu	13:30	Till	15:00	weekly	C424
Group III	Thu	15:15	Till	16:45	weekly	D201
Group IIII	Thu	17:00	Till	18:30	weekly	F429

See: [ZEuS](#)

Programmierkurs II, 2 hours (3cr)

P. Schäfer/ R. Li

Group I	Thu	15:15	till	16:45	weekly	P602
Group II	Fri	10:00	till	11:30	weekly	ZT702

See: [ZEuS](#)

5. Social Science Applications

Computational Modeling of Social Systems, 2+2 hours (6cr)

M. Pellert/G. Marzo

Tuesday, 15:15 – 16:45, C424

Wednesday, 17:00 – 18:30, D433

See: [ZEuS](#)

Social Media Data Analysis, 2+2 hours (6+3cr)

M. Pellert

Wednesday, 10:00 – 11:30, C422

Tutorial

Group I	Thu	10:00	till	11:30	weekly	D431
---------	-----	-------	------	-------	--------	------

See: [ZEuS](#)

Applied visual analytics – Directed Studies, 2 hours (6cr)

D. Keim/ U. Schlegel

Wednesday, 17:00 – 18:30, ZT1204

See: [ZEuS](#)

Künstliche Intelligenz, 2 hours (6cr)

C. Beck

Tuesday, 13:30 – 15:00, G209

See: [ZEuS](#)

The politics of inequality, 2 hours (7cr)

M. Busemeyer

Tuesday, 17:00 – 18:30, Y311

See: [ZEuS](#)

Strukturgleichungsmodelle, 2 hours (4cr)

D.Jendryczko

Wednesday, 10:00 – 11:30, F423

See: [ZEuS](#)

Seminar machine learning and optimization, 2 hours (3cr)

T. Sutter

Friday, 10:00 – 11:30, L829

See: [ZEuS](#)

Introduction to survey experiments - Seminar, 2 hours (7cr)

L. Rudolph

Tuesday, 15:15 – 16:45, D522

Tuesday, 13:30 – 16:45, D522 (02.07-16.07)

See: [ZEuS](#)